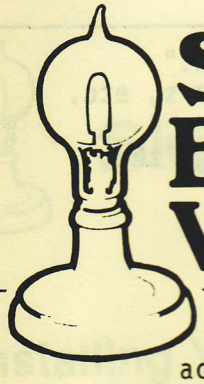

Skyles Electric Works

BIG KBD

Congratulations on purchasing Skyles 74KB big keyboard. The accompanying cassette tape will convert the 74KB to one of the most versatile "large computer-like" ASCII/Typist keyboards available. First a brief instruction for the usage of "BIG KBD" keyboard enhancement cassette tape.

"BIG KBD" consists of 870 bytes of 6502 machine language program and tables. This requires that there be two versions of the program. One for Original ROM (OR) PET's and one for New ROM (NR) PET's. Both sides of the tape cassette contain both programs. "BIG KBD" also contains a short BASIC program to relocate automatically the "machine language program" to the top of memory where it is invisible to any further BASIC programs that you may wish to add. The BASIC program part also "erases" itself after it has done the relocations. Enough of the theory, let us load and use the cassette.

1: Select the A or B side of the cassette that has the program you want as the first program.

2: Install cassette in tape recorder. Rewind cassette using rewind button.

3: Reset your PET.

4: If you are using a Commodore 2040 Dual Disk "Wedge" program, load the "Wedge" (LOAD"*",8).

5: Load BIG KBD using SHIFT, RUN buttons.

6: If you wish to make a backup copy of the program, do it now.

7: Type RUN, RETURN.

8: Follow instructions on screen. Please write down the SYS address for future use.

9: You may at this time save the machine language program using a machine language monitor. The SYS address converted to Hexidecimal to SYS address plus 870 (decimal) is what you want to save. You may reload this program from BASIC using the usual loading procedures.

10: Type some alphabet characters, type the top row. Repeat using SHIFT key.

11: Repeat 10 only type SHIFT, REV first. You are now in "shift-lock" position. To return type REV. Note the upper row is not affected by the "shift lock," just the shift. Your keyboard now is similar to the large computer terminals.

12: Type a couple lines of program in lower case. Type LIST. The PET does not enter programs except in upper case.

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13: Type a couple lines of program in upper case using "shift lock." Now "list" them. Get used to using the top row for line numbers, etc.

14: Hold down any key --- that is, auto-repeat. Practice "driving" the cursor around the screen.

15: Enjoy!

Details for the Curious

BIG KBD consists of four tables that convert each key to a PET ASCII (American Standard for Information Interchange). If you wish to change any key to a different one, it can easily be done. You may change all the keys, however that is a bit tedious. You may make the change before or after you have "RUN" "BIG KBD." In the former case, you can save to a BASIC version of your variation of "BIG KBD." You can also save a machine language version as mentioned in STEP 9 after you have changed the tables.

The four tables are:

TABLE	SHIFT LOCK	SHIFT	"0" ADDRESS (Decimal)
1	OFF	ON	346
2	OFF	OFF	474
3	ON	ON	602
4	ON	OFF	730

For example, let us change the left square bracket to a left parenthesis. Type:

```
?ASC("[")  return
 91
```

91 is our KO (Key Offset) address.

Now type:

```
?ASC("(")  return
 40
```

40 is our new "key value."

Now recall the SYS address. Or if you want to make this change before you "RUN""BIG KBD" use 2509 as SYS address.

Now type:

POKE SYS address+0 address+KO address, key value
Example before RUN

```
POKE2509+474+91,40
READY
```

Now RUN program and try square bracket and observe you get a left parenthesis. To restore square bracket key, type:

```
POKE(SYS address+0+KO),91
or
POKE(SYS address+474+91),91
```

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13: Type a couple lines of program in upper case using "shift lock." Now "list" them. Get used to using the top row for line numbers, etc.

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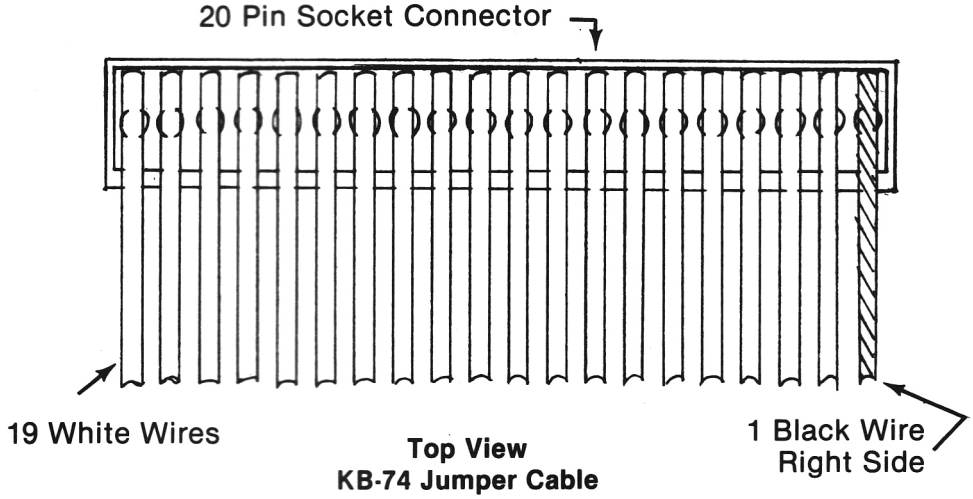
or
POKE(SYS address+474+91),91
```

Skyles Electric Works

Installing Your Skyles BIG-KeyBoard™ Model 74KB

Congratulations on your purchase of a Skyles Big KeyBoard. We know you'll have many years of enjoyment with it. But first, we want you to install it properly.

1. Turn off your PET and unplug the line cord from the wall socket.
2. Remove the two screws on each side of your PET that secure the top cover to the base.
3. Open top cover, using brace on left side to hold open.
4. Unplug the 20-pin wide connector at the front center of the main PC Board. Plug in the 74KB Jumper Cable in its place. (*Note: Black conductor should be in the last position on the right side.*)



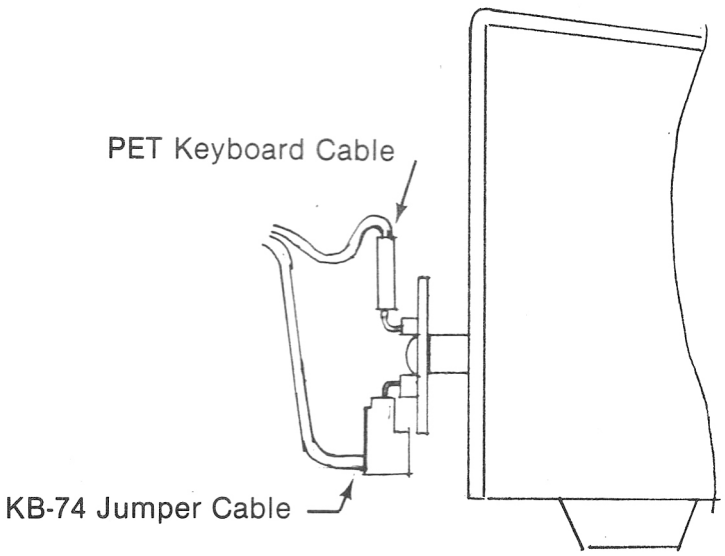
Top View
KB-74 Jumper Cable

10301 Stonydale Dr., Cupertino, CA 95014 (408) 735-7891

5. Close the PET, bringing *both* the 74KB Jumper Cable and the PET keyboard cable out through the front of the PET.

(Note: This installation procedure assumes that you want to run the 74KB and the PET keyboard in parallel. Inasmuch as the 74KB contains all *the functions of the PET keyboard, you may choose to leave the PET keyboard cable inside the PET. On the other hand, you may want to allow the operation of the PET keyboard, since the graphic characters do not appear on the Skyles 74KB keytops.)*

6. Plug the 74KB cable into the bottom of the 74KB jack board on the back of the unit. Plug the PET keyboard cable into the top of the jack board.



Side View
Back of NB-74

7. Now turn on your PET. Your Skyles 74KB is ready to go. Enjoy!